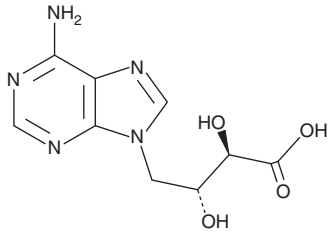
PRODUCT INFORMATION

D-Eritadenine

Item No. 21747

CAS Registry No.:	23918-98-1
Formal Name:	6-amino-αR,βR-dihydroxy-9H-purine-9-butanoic acid
MF:	$C_9H_{11}N_5O_4$
FW:	253.2
Purity:	≥95%
UV/Vis.:	λ_{max}: 210, 261 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

D-Eritadenine is supplied as a solid. A stock solution may be made by dissolving the D-eritadenine in the solvent of choice, which should be purged with an inert gas. D-Eritadenine is slightly soluble in 1N hydrochloric acid.

Description

D-Eritadenine is an adenosine analog and a potent, reversible inhibitor of S-adenosylhomocysteine hydrolase (SAAH; IC_{50} = 7 nM).[1] It inhibits growth of *C. parvum* parasites (MIC_{50} = 3 µM) without exhibiting cytotoxicity in HCT-8 cells (CC_{50} = >1 mM).[2] Dietary administration of D-eritadenine (50 mg/kg) increases liver microsomal phosphatidylethanolamine concentration and decreases liver microsomal Δ^6 desaturase activity and plasma cholesterol levels in rats.[3]

References

1. Huang, Y., Komoto, J., Takata, Y., *et al.* Inhibition of S-adenosylhomocysteine hydrolase by acyclic sugar adenosine analogue D-eritadenine. Crystal structure of S-adenosylhomocysteine hydrolase complexed with D-eritadenine. *J. Biol. Chem.* **277(9)**, 7477-7482 (2002).
2. Ctrnáctá, V., Fritzler, J.M., Surinová, M., *et al.* Efficacy of S-adenosylhomocysteine hydrolase inhibitors, D-eritadenine and (S)-DHPA, against the growth of *Cryptosporidium parvum* in vitro. *Exp. Parasitol.* **126(2)**, 113-116 (2010).
3. Shimada, Y., Yamakawa, A., Morita, T., *et al.* Effects of dietary eritadenine on the liver microsomal Δ6-desaturase activity and its mRNA in rats. *Biosci. Biotechnol. Biochem.* **67(6)**, 1258-1266 (2003).

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